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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,275	09/26/2003	Mutsumi Kimura	117115	7838

25944 7590 06/08/2005

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

NGUYEN, THANH T

ART UNIT PAPER NUMBER

2813

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/670,275	<b>Applicant(s)</b> KIMURA, MUTSUMI	
	<b>Examiner</b> Thanh T. Nguyen	<b>Art Unit</b> 2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 4/6/05.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 4/6/05 have been fully considered but they are not persuasive.

Applicant's election of Group I, claims 1-8 in the reply filed on 4/6/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). This application contains claims 9-14 are drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are stand rejected under 35 U.S.C. 102(b) as being anticipated by Iwafuchi et al (U.S. Patent Publication No. 2002/0096994A1), previously applied.

Referring to figures 1-12, Iwafuchi et al. teaches a method of manufacturing an electro-optical device including a display region in which a plurality of basic pixels (see paragraph# 142) are arranged, each basic pixel including a plurality of color pixels (DGOO, DROO, DBOO, see paragraph# 154), the method comprising:

forming the lines on a first substrate (80, board with LED/pixel mounted) supply driving signals to respective basic-pixel driving-chips (PT, see paragraph# 183-184), correspondingly to the arrangement of the basic pixels (LED mounted, see figure 1, 12, paragraphs# 154, 182), and to transmit the driving signals to respective pluralities of electro-optical elements (LED) which constitutes the plurality of color pixels of each basic pixel (LED mounted, see figures 1-3, 11-15, paragraphs# 183-191);

forming the basic-pixel driving chips (PT) on a second substrate (51), as chips to be transferred to each basic pixel, a drive circuit to drive the color pixels individually (see figures 2-5, paragraphs# 166-174); and

transferring the respective basic-pixel driving-chips (PT) from the second substrate onto the first substrate, and connecting the drive circuits to regions of the lines corresponding to the basic pixels (see figures 11-12, paragraph# 182-184). Noted that PT chip includes thin film transistor of gate, source/drain electrodes as driving chip, see paragraphs 166, 171, 174.

Regarding to claim 2, each of the basic-pixel driving-chips (LED) including a plurality of control devices to individually control operating conditions of the plurality of electro-optical elements (see figure 1, paragraph# 54, 136).

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Regarding to claim 3, each of the control devices including a first transistor to control current flowing in the electro-optical element and a second transistor to operate the first transistor in accordance with input signals (see figure 1).

Regarding to claim 4, gate electrode of the second transistor included in each of the control devices being connected to a common line passing through each of the control devices (see figure 1).

Regarding to claim 5, each of the basic-pixel driving-chips (LED) including a plurality of first connection terminals (figure 1) serving as electrical connections to the basic-pixel driving-chip;

the first substrate including a plurality of second connection terminals (81) provided in regions to which the basic-pixel driving-chips are transferred in one-to-one correspondence with the first connection terminals and serving as electrical connections to the lines (see figure 12),

the transferring including accomplishing electrical connection between the basic-pixel driving-chips and the first substrate by carrying out the transferring to bring the plurality of first and second connection terminals into contact with each other (see figure 11-12), and

each of the first connection terminals and each of the second connection terminals being allocated to the common line included in the basic-pixel driving-chip and to the lines on the first substrate to be electrically connected to the common line, respectively (see figures 1, 11-12, paragraph# 180+).

Regarding to claim 6, the transferring including forming an adhesive layer (61) on at least one side of the first connection terminals formed in the basic-pixel driving-chips or the second connection terminals formed on the first substrate (60, see figure 9+, ).

Regarding to claim 7, the plurality of first connection terminals (81) being spaced from one another by a predetermined distance, and also being arranged in two lines along one direction of the basic-pixel driving-chip (see figure 12, paragraph2# 182+).

Regarding to claim 8, the forming the chip on a second substrate including forming a peeling layer (124/128/166) interposed between the second substrate (127) and the basic-pixel driving-chips (122) , the peeling layer having a feature that application of energy causes a phase transformation to weaken the bonding strength to the basic-pixel driving-chips (see figure 22, paragraph# 204+). Noted that, it is inherent that peeling layer have a feature that application of energy causes a phase transformation to weaken the bonding strength to the basic-pixel driving chip so that would be easy to peel from the chips.

### ***Response to Arguments***

Applicant's arguments filed 4/6/05 have been fully considered but they are not persuasive.

Applicant contends that the prior art does not teach “the transferred chip includes a plurality of thin film transistors, and controls independently the respective color pixels 1, 2, 3 includes in one pixel”. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the transferred chip includes a plurality of thin film transistors, and controls independently

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the respective color pixels 1, 2, 3 includes in one pixel) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant contend that Iwafuchi does not disclose a drive circuit to drive individually the respective color pixels included in one pixel. In response to applicant that Iwafuchi teaches a drive circuit to drive individually the respective color pixels included in one pixel (see figures 2-5, paragraphs# 166-174).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Nguyen whose telephone number is (571) 272-1695, or by Email via address Thanh.Nguyen@uspto.gov. The examiner can normally be reached on Monday-Thursday from 6:00AM to 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached on (571) 272-1702. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956 (**See MPEP 203.08**).

A handwritten signature in black ink, appearing to read 'Thanh', with a long horizontal stroke extending to the left.

Thanh Nguyen  
Patent Examiner  
Patent Examining Group 2800

TTN